Product Specifications:
CAP4C

Capacitance: 4,00,000µF (4 Farad)
Capacitance tolerance: +/-10%
Working voltage range: 16 VDC
ESR: <0.00195 ohm @ 120Hz, 25ºC
Headscrew terminal type: M6 metric system thread
Dimensions: 11-9/16" (290mm) tall (including terminals) x 3-15/16" (100mm) diameter

One Year Limited Consumer Warranty

This BOSS Audio Systems product is warranted for a period of one year from the date of purchase against defects in material and workmanship. The warranty is for repair or replacement at the sole discretion of BOSS Audio Systems. During this period, there will be no charge for replacement, provided the unit is returned to us, shipping prepaid. This warranty does not cover any unit subjected to abuse, misuse, incorrect wiring connection or installation, water damage, or repair by someone other than a BOSS Audio Systems repair technician at the factory. This warranty does not apply to any unit which has been modified or used in a manner contrary to its intended purpose, and does not cover damage to the unit caused by installation or removal of the unit. Units which are found to have been damaged by improper connection or installation, resulting in blown or leaking vent plugs, stripped terminals or other unspecified damage are not covered by this warranty, but may be replaced at our absolute and sole discretion.

Any damages resulting from legal action for breach of expressed or implied warranties shall be limited to the cost of the original purchase of the unit. As a condition of warranty, it is agreed that the remedy provided in this document is the sole remedy under this warranty. All liability for coincidental damages is excluded. The purchaser agrees to retain the original proof of purchase for the purpose of establishing the effective date of this warranty. Should your BOSS Audio Systems product be replaced under warranty by BOSS Audio Systems or an authorized BOSS Audio Systems dealer, this replacement shall be considered a transaction under the original warranty, and does not extend the original warranty period. This warranty is nontransferable.

All warranties including, but not limited to express warranty, implied warranty, warranty of merchantability, fitness for particular purpose, and warranty of non-infringement of intellectual property are expressly excluded to the maximum extent allowed by law, and we neither assume or authorize any person to assume for it any liability in connection with the sale of the product. We have absolutely no liability for an and all acts of third parties, including BOSS Audio Systems and its authorized dealers and installers.

BOSS AUDIO SYSTEMS

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USER'S MANUAL

BOSS® AUDIO SYSTEMS

4 FARAD
STIFFENING CAPACITOR

CAP4C

WARNING!!

This power capacitor may explode and cause serious injury or death if abused or connected improperly!

Refer to this installation manual for correct procedures when making connections, and charging and discharging the capacitor. Never expose the capacitor to voltages higher than specified!

Unpacking your BOSS AUDIO SYSTEMS Capacitor System

Unpack the capacitor and all other items carefully and check to make sure nothing is missing. If any item from the list below is missing, please contact your dealer immediately.

The BOSS AUDIO SYSTEMS Capacitor System includes:

Power Capacitor
Mounting Brackets
Bright Silver Plated Head Screw Terminal
Installation Tools, including resistor for charging/discharging

Operating Features

This power capacity is an energy storage device. It is designed to supplement you car's charging system, when your audio amplifier places a high current demand upon it. This occurs, for example, when the music you are playing contains a loud, transient, deep bass signal.

The overall bass response of your system will be enhanced by using this device. Since automotive batteries are not designed to deliver the current required by modern car audio systems, a capacitor such as this one, which is capable of discharging extremely rapidly on demand, is a logical addition to your audio system.

In addition, this capacitor can filter out the AC voltage induced in the amplifier's power supply. Unchecked, this voltage can cause DC noise in the sound system. It is recommended to use a capacitor with a minimum of one microfarad (1F) for each 1000 watts of amplifier power. (you can never have too much capacitance for any audio system).

The BOSS AUDIO SYSTEMS capacitor features a digital voltage display.

Installation

1. Install the capacitor as close as possible to your amplifier. The ideal location is one which allows for short wiring runs, but keeps the capacitors somewhat isolated from any stray heat generated by the amplifier.

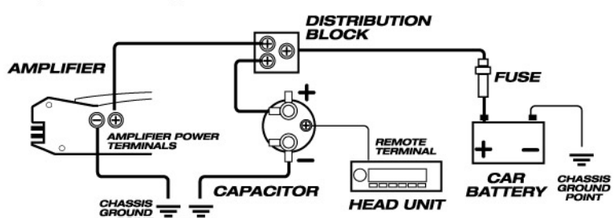
2. While the capacitor can be mounted in any position, using the brackets provided, care should be taken to ensure that the venting plug on top of the capacitor is unobstructed. This plug is a pressure relief plug for the capacitor's fluid dielectric material should the current polarity be reversed. If this was occur, fluid will exit from the vent plug (at this point, the capacitor will require replacement).

Wiring Guidelines

1. Keep the positive power wire as short as possible, and connect it directly to the amplifier's battery supply cable. It is highly recommended to use a ***high performance distribution block*** to create a splice in the battery supply cable. Do not install a fuse between the capacitor and the amplifier, but make sure there is an appropriate fuse in the main supply cable.

2. The ground cable for the capacitor should also be as short as possible, and connected directly to a good, clean bare metal chassis ground point. DO NOT ground the capacitor directly to the amplifier ground terminal or ground cable.

3. For the above connections, use cable of the same or heavier gauge than those which the amplifier uses. High performance 4GA or 8GA OFC (oxygen free copper) cables are a good choice for this application. 18GA wire is suitable for the remote turn-on connection.



SUGGESTED WIRING

Power-up procedures

After installing the capacitor according the directions on the previous page, follow these instructions for powering up and charging the capacitor. **This procedure is extremely important to perform, and eliminates the possibility of damaging the capacitor, battery and other audio devices.**

1. Connect the ground cable to the capacitor (-) terminal.

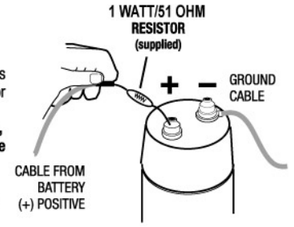
2. Temporarily attach the resistor supplied with the capacitor to the power cable, using electrical tape to secure the connection.

3. SEE FIGURE 2 (AT RIGHT). Holding the power cable securely, place the free end of the resistor on the (+) terminal of the capacitor. While this is occurring, the status LED will be illuminated, and the red decimal point will flicker, indicating that the system is charging the capacitor.

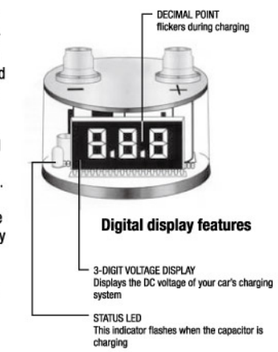
When the capacitor is fully charged, the decimal point will no longer flicker, and the display will show the DC voltage of the car charging system.

4. Remove the tape, detach the resistor from the power cable, and attach the power cable securely to the (+) capacitor terminal.

5. Put the resistor in a safe storage location, as you will need it in the future when you need to discharge the capacitor.



Charging the capacitor


DECIMAL POINT flickers during charging
8.8.8
3-DIGIT VOLTAGE DISPLAY
Displays the DC voltage of your car's charging system
STATUS LED
This indicator flashes when the capacitor is charging

Digital display features

CAUTION! When you turn off your car stereo, power is turned off to the capacitor, and its display will turn off. However, the capacitor may still hold a powerful charge, so always treat it as if it is powered ON even if the display is OFF!

The power capacitor's role

When connected to power, the capacitor system is generally in "standby" mode. If the voltage drops below the normal level the capacitor will automatically turn on, ensuring a stable voltage and current is provided to the connected amplifier.

Although the usual concern which motivates a user to install the capacitor system is voltage drops due to a powerful connected amp producing loud bass signals, other automotive equipment and accessories can also cause this. In any case, the capacitor will help to ensure stable voltage for your entertainment system.

Reverse polarity protection feature

If the polarity of the connections to the capacitor is reversed, damage to your entertainment or vehicle electrical system can result. To eliminate this threat, we have incorporated a relay system within the capacitor design which will disable the capacitor and trigger a buzzer to sound. The capacitor system will only be able to be turned on if wiring is connected properly.

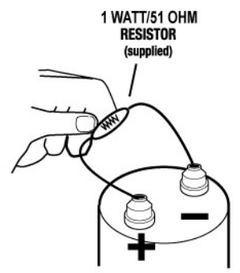
Power-down and removal instructions

Never remove this capacitor without discharging the stored power – it can give a dangerous electrical shock!

To discharge the capacitor, follow these instructions:

1. Disconnect the cables from the capacitor in the following order:
   a) positive (+) cable
   b) ground (-) cable
   c) remote turn-on cable

2. Holding the resistor provided as shown in the picture to the right on this page, touch the leads to the positive (+) and ground (-) terminals of the capacitor. Wait about 30 seconds and the capacitor will be discharged. Then you can safely remove and handle it.



Discharging the capacitor

Congratulations

on your purchase of this high quality car audio power capacitor system. This manual provides detailed information regarding the function, installation and operation of this product. Please read it carefully before you attempt to install and use this capacitor.

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